

CLAIMS

What is claimed is:

1. An apparatus comprising:
 - a cam sleeve having a first end and a second end;
 - a first cam plate fixedly attached to said cam sleeve at said first end;
 - a second cam plate fixedly attached to said cam sleeve at said second end;
 - a first cam washer rotatably received by said first cam plate;
 - a second cam washer rotatably received by said second cam plate; and
 - a bolt having a bolt head fixedly attached to said first cam washer, an elongate body extending between said first and second ends of said cam sleeve, and a shank portion fixed for rotation with said second cam washer;

wherein rotation of said bolt causes said first and second cam washers to react against said first and second cam plates to position said bolt relative to said cam sleeve along a first axis generally perpendicular to a longitudinal axis of said bolt.
2. The apparatus of claim 1 wherein said cam sleeve further includes a plurality of projections formed on an inner wall thereof, said projections operable to engage said elongate body of said bolt and restrict movement of said bolt along a second axis, said second axis being generally perpendicular to said longitudinal axis of said bolt and offset substantially 90° from said first axis.

3. The apparatus of claim 2 wherein said elongate body of said bolt includes a generally cylindrical shape, said cylindrical shape abutting said projections to restrict movement of said bolt along said second longitudinal axis.
4. The apparatus of claim 1 wherein said first cam washer includes a first aperture formed eccentric from an axis of rotation of said first cam washer, said first aperture matingly received by said elongate body of said bolt and fixedly attached thereto.
5. The apparatus of claim 1 wherein said second cam washer includes a second aperture formed eccentric from an axis of rotation of said second cam washer, said second aperture matingly received by said shank portion of said bolt.
6. The apparatus of claim 5 wherein said shank portion includes a keyed portion, said keyed portion matingly received by said second aperture such that said second cam washer is fixed for rotation with said bolt.
7. The apparatus of claim 5 wherein said shank portion includes a flat, said flat matingly received by said second aperture such that said second cam washer is fixed for rotation with said bolt.

8. The apparatus of claim 1 wherein said first cam plate includes a first pair of reaction arms, said first reaction arms engaging an outer surface of said first cam washer to restrict lateral movement of said first cam washer while concurrently permitting rotation of said first cam washer relative to said first cam plate.

9. The apparatus of claim 1 wherein said second cam plate includes a second pair of reaction arms, said second reaction arms engaging an outer surface of said second cam washer to restrict lateral movement of said second cam washer while concurrently permitting rotation of said second cam washer relative to said second cam plate.

10. The apparatus of claim 1 wherein said shank portion of said bolt extends through said second cam plate generally away from said cam sleeve.

11. The apparatus of claim 10 wherein said shank portion matingly receives a bushing, said bushing operable to matingly receive a toe link.

12. The apparatus of claim 11 wherein said shank includes a plurality of threads, said plurality of threads operable to matingly receive a nut to retain said bushing and toe link on the apparatus.

13. The apparatus of claim 11 wherein said toe link is adapted to be connected to a suspension system, said toe link adapted to be adjusted relative to said suspension system through movement of said bolt relative to said cam sleeve.

14. The apparatus of claim 13 wherein said cam sleeve is adapted to be fixedly attached to said suspension system.

15. A method for adjusting a suspension system comprising:
- forming a cam sleeve having a first and second end and a plurality of projections on an inner surface of said cam sleeve;
 - fixedly attaching said cam sleeve to an external structure;
 - broaching said projections to provide a predetermined opening between said projections positioned in a predetermined location relative said external structure;
 - fixedly attaching a first cam plate to said first end of said cam sleeve and a second cam plate to said second end of said cam sleeve;
 - providing a first cam washer rotatably supported by said first cam plate, said first cam washer including a first aperture formed eccentrically from an axis of rotation of said first cam washer;
 - providing a second cam washer rotatably supported by said second cam plate, said second cam washer including a second aperture formed eccentrically from an axis of rotation of said second cam washer;
 - fixing said first cam washer for rotation with said bolt;
 - inserting said bolt through said first and second cam plates;
 - inserting said bolt through said second cam washer and fixing said second cam washer for rotation with said bolt;
 - rotating said bolt and said first and second cam washers relative to said first and second cam plates to position said bolt relative said cam sleeve and said external structure.

16. The method of adjusting a suspension system of claim 15 wherein said external structure is a suspension system.

17. The method of adjusting a suspension system of claim 15 further comprising the step of positioning said bolt adjacent said plurality of projections.

18. The method of adjusting a suspension system of claim 15 further comprising the step of loosely attaching a toe link to said bolt proximate said second cam washer and securing a fastener to an end of said bolt to retain said toe link.

19. The method of adjusting a suspension system of claim 18 further comprising the step of rotating said bolt to position said toe link relative said external structure to position said toe link in a desired position relative thereto.

20. The method of adjusting a suspension system of claim 19 further comprising the step of tightening said fastener to fixedly hold said toe link in said desired position relative said external structure.